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ABSTRACT

This report describes the development of an organic curriculum in the public schools of Fort Lauderdale, Florida. Superintendents of 13 school districts met with members of the U. S. Office of Education in May 1967 to establish the initial network of the curriculum overhaul program entitled Educational Systems for the Seventies (ES'70). This report covers a) the objectives as initially defined including a redefinition of educational goals and an overhaul of the educational process, b) the identification of the adjustments to the initial structure and redefinition of goals undertaken through the coordinator's organization, c) the functions and requirements of the coordinator, d) major activities and accomplishments of the program, and e) the dissemination activities. The conclusion suggests that this type of consortium has a greater impact upon education, especially in the area of staff improvement and dissemination activities, than do research and evaluation by institutions of higher education. Appendixes include learning packages and other documentary evidence to support the text. (Related documents SP 005 658 and SP 005 662 are ES'70 programs in other schools.) (MJM)

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FINAL REPORT
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COORDINATION OF ORGANIC CURRICULUM DEVELOPMENT IN THE PUBLIC SCHOOLS OF FORT LAUDERDALE, FLORIDA

3600 Southwest College Avenue
Mr. Kenneth T. Smith
ES'70 COORDINATOR

OCTOBER 1971

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SUMMARY

With the increasing complexity of our rapidly changing technological society, our present educational system has found itself becoming more and more obsolete, and in need of a major redefinition of goals. The organic curriculum is an attempt at a major systematic overhaul of our present educational process. It proposes to radically change the present secondary educational program in the direction of a learner-oriented curriculum with the ultimate objective being the integration of academic training, occupational preparation, and personal development in grades nine through twelve. This comprehensive program will draw upon past, present, and future research in order to maximize individual instruction. Broward County is one of twenty school districts that agreed to become involved in the planning, development, and eventual implementation of the program.

INTRODUCTION

On May 11 and 12, 1967 at Nova High School, Fort Lauderdale, Florida the superintendents of 13 school districts met with Drs. David Bushnell and Robert Morgan of the U. S. Office of Education to establish the initial network. At that time each district superintendent agreed to employ a full-time coordinator whose responsibility would be to carry out the objectives of the organic curriculum programs. It was also agreed that the U. S. Office of Education would provide funds to pay program coordinators beginning September, 1967.

Objectives as Initially Defined

The overall objective of the organic curriculum was the redefinition of educational goals and overhaul of the educational process. Therefore, each full-time coordinator was to give consideration to:

1. Delimit the general purposes of the organic curriculum to the local school district.

   These general purposes are as follows:

   a. Integrate academic and vocational learning by appropriately employing vocational preparation as one of the principal vehicles for the inculcation of basic learning skills. In this way learning could be made more palatable to many students who otherwise have difficulty seeing the value of a general education.

   b. Expose the student to an understanding of the "real world" through a series of experiences which capitalize on the desire of youth to investigate for himself.

   c. Train the student in a core of skills that are capable of being generalized related to a cluster of occupations rather than just those related to one specialized occupation.

   d. Orient students to the attitudes and habits which go with successful job performance and successful living.

   e. Provide a background for the prospective worker by helping him to understand how he fits within the economic and civic institutions of our country.

f. Make students aware that learning is life-oriented and need not, indeed must not, stop with his exit from formal education.

g. Help students cope with a changing world of work through developing career strategies which can lead to an adequate level of income and responsibility.

h. Create within the student a sense of self-reliance and awareness which leads him to seek out appropriate careers with realistic aspiration levels.

2. Deal with a variety of complex questions which may arise from radical remodeling of secondary curriculum.

3. Develop a tolerance for turbulence while establishing a climate for change.

4. Develop an integrated comprehensive curriculum for grades 9-12.

5. Act as an agent for communication.

6. Evaluate each step of the program.

Modification of the objectives to fit each local district was to be determined by the administrative personnel.

Adjustments

As the network grew to 20 schools certain inherent weaknesses within the initial structure were identified and a redefinition of goals was undertaken through the coordinators' organization. The initial goals were revised and redefined as follows:

Learning is an individual process. Different students approach the teaching/learning situation with different needs, goals, strengths, limits and experiences. A learner-responsive instructional system provides for each learner the personal opportunity to participate in the:

1. Setting of his own short, intermediate and long-range goals.

2. Design of those educational experiences through which he will achieve success.

3. Selection of learning methods and materials to be used without regard to subject matter boundaries.

4. Budgeting of his time, within broad limits, in order to learn at a rate which is appropriate for him.

5. Establishment of levels of performance to be reached which specify satisfactory fulfillment of curricular objectives.

The ES'70 system is designed to develop learners who have the necessary skills and knowledge which prepare them to function as effective citizens in the social, political and economic spheres of today's and tomorrow's world.

Functions of the Coordinator

To accomplish the above objectives, the project coordinator had the ability to perform the following tasks:

1. Specify and evaluate instructional objectives for the local school district.

2. Select and develop instructional materials and media.

3. Become involved in training programs within and outside the local school district.

4. Analyze the present nine-through-twelve curriculum.

5. Establish relationships and communication with the community.

6. Define the tasks and roles of community elements.

7. Plan and try-out the program in selected schools within the district.

In order to carry out the many tasks and deal with complex educational problems, the program coordinator must have had a variety of experience in his educational career. He should be well grounded in the behavioral sciences and humanities. He should have a broad background of teaching and administrative experiences at the secondary level. Demonstrated research ability through participation in various research programs, such as action research projects, will have prepared the coordinator for implementation and evaluation of the total program. To establish a climate for

change, the coordinator must be skilled in public relations. A strong background in curriculum work and a thorough understanding of philosophical, psychological, and social basis for curriculum decision-making will promote implementation of the organic curriculum. Obviously it is recognized that not all men are so well equipped, therefore, each coordinator must engage in self-study and involve himself in the U. S. Office of Education projects and other programs to remedy any deficiencies. In conclusion, perhaps the most important characteristic of the individual is a dedicated commitment to an optimum educational program.

Major Activities and Accomplishments

A Learning Activity Package for teachers entitled "A LAP on Writing Learning Activity Packages" was developed by the Coordinator.[1] A complementary package has been developed by the Coordinator on "Preparing Audio-Visual Media."[2]

Mr. Tom Embry and the Coordinator previewed an audio-tutorial program in Lafayette, Indiana under the direction of Mr. Lowell Knoop; Mr. Knoop is working on developing audio-tutorial methods of teaching science using Purdue University as a resource.

To assist in developing curriculum material, the Coordinator contacted Dr. David Jelden who is now implementing the package approach at the University of Northern Colorado in Electronics. These packages are sent to Nova for evaluation and used by county teachers as guides in helping them develop packages for Electronics.

Dr. Bruce Tuckman and Mr. Joseph Casello visited Nova and interviewed students, teachers and administrators. Appointments were set up by the Coordinator. The SCOPE Center at Rutgers is preparing a slide series in which Nova is included.

The Coordinator sent approximately four hundred behavioral objectives to Dr. James Popham at U.C.L.A. We hope to be able to send approximately seven hundred more, being developed and evaluated by the Broward County Schools.

Mr. Alfred Rapp and the Coordinator developed a Learning Activity Package on Evaluative Procedures at the Nova Schools. This was used in in-service training of teachers during the Nova pre-school workshop.

[1]See Appendix A for copy of this Learning Activity Package.
[2]See Appendix B for copy of this Learning Activity Package.

The Coordinator served as a consultant to the Performance Objective Workshop in Willingboro, New Jersey. Presented a slide/audio program on the Nova Schools and the package approach used as a curriculum vehicle. Was impressed with the workshop and the organization of a multi media/mode approach developed by the Willingboro staff under the leadership of Mr. George Brandau.

The Coordinator and Scott Engineering Corporation of Pompano Beach, Florida, have completed a 16millimeter film on "Mechanical Technology." This was photographed in the laboratory at Nova High using local students.

The Coordinator participated in the Interrelated Mathematics-Science Evaluation Workshop held October 2-4, 1969 at Nova High School. Other ES'70 schools involved were Baltimore, San Antonio, and Quincey. The major consultant was Dr. Donald J. Marquette, Superintendent, Valhalla, New York.

The Coordinator worked on the development of scripts and visual sequences for a production entitled "The Learning Activity Package." A copy of this presentation may be borrowed from the Department of Dissemination, Nova High School, 3600 Southwest College Avenue, Fort Lauderdale, Florida 33314.

The Coordinator and the Director of Dissemination updated the slide and audio presentation on the Nova Schools.

Coordinator worked with Mr. Donald Jarrett, in developing materials for Florida Accrediation Standards within each department. All departments will collate performance objectives presently being used and cross index these with the coding developed in the State Accrediation Handbook.

The Coordinator has acted as a Consultant to Scott Engineering Science Corporation for the development of a media carrel to implement slides, audio tapes and single concept loop films on a programmed basis.

The Coordinator acted as a consultant for the B O E Project with Purdue, Indiana, and Illinois Universities in the area of English.

A meeting was convened to plan for in-service training for teachers who will be involved in the new schools and eventually affecting all teachers to accomplish the phase of all schools going to the individualized approach. Dr. Elden Harms of Florida Atlantic University, Dr. Dan Lee in charge of in-service training in Broward County Schools, Director of Dissemination Broward County, and the ES'70 Coordinator made initial plans for the in-service training program.

Assisted in instruction of an in-service program for industrial arts teachers. Covered visual communications using behavioral objectives.

Curriculum committees were structured in industrial arts covering 10 areas. This was accomplished through the local industrial arts organization with Nova personnel used in leadership roles. Approximately 90 teachers were placed in groups of 10 with a chairman and assistant chairman. Phase 1 brought all chairmen and assistants together in a meeting where Al Rapp and the ES'70 coordinator explained the objectives of the meeting. Vimcet filmstrips were used to explain Educational Objectives. Each chairman and assistant chairman will meet with their small group and cover Phase 1.

The coordinator worked with the county supervisors in art, home economics and industrial arts in the development of the middle school continuum. Middle school teachers were released to write the continuum for the new unified arts program with Nova providing the conference room and all supervisors and the Coordinator assisting.

Visited Bill Ryan, ES'70 Coordinator in Breathitt County. Mr. Embry and I worked with his staff on Learning Activity Packages. We sent the entire scope and sequence of the American Industry packages developed at Nova to Mr. Ryan. His staff requested packages in other areas of industrial arts and physics which were forwarded by this office.

Attended the ES'70 Network meeting with Mr. Alfred Ryll, Area Superintendent of Broward County held in Willingboro, New Jersey.

Participated in Conference at Bloomfield Hills, Michigan for ES'70 Coordinators.

Visited the school system in Duluth, Minnesota with Nova staff members. My main interest was the open lab concept which we plan to implement in new facilities on the Nova Complex.

Attended Coordinators Conference in Houston, Texas then proceeded to San Antonio, Texas for the combined ES'70 Conference.

The Coordinator attended the planning meeting in Washington D. C. at the E.F. Shelley Company.

Implemented the in-service training program "Developing a Systems Approach to Curriculum for Individualization" for the Nova Staff. Forty-five staff members are enrolled from the elementary and high school. The basic description is to attain a system of in-service education in Broward County to attain the objectives of individualization using performance objectives.

Thirty modules of in-service training material are being tested and evaluated for effective utilization for Broward County. The Vimcet series is being used for eighteen of the programs using the response sheets, test sheets and filmstrip/audio tapes. The first analysis of the filmstrip "Education Objectives" is contained in Appendix C.

The I.M.S. Project Director attended the ES'70 Network Meeting at Quincey, Massachusetts, October 28 - 31, 1969, accompanied by Mr. Hilton Lewis, Principal of Nova High School and ES'70 Coordinator.

This conference was particularly helpful to the I.M.S. Project Director, in that firsthand experience was obtained observing the use of Learning Activity Packages in a conventional school setting.

Attended the conference at Cherry Hill, New Jersey involving computer-assisted instruction with Mr. Warren Smith, Director of Nova Schools.

Attended the American Vocational Association Conference in Boston, Massachusetts. Was impressed with the Quincey ES'70 Booth. This conference should have more involvement displaying curriculum concepts developed by ES'70 network schools.

The Coordinator attended the National Laboratory for Advancement of Education in Washington, District of Columbia and participated in the Coordinators' Meetings.

Participated in the ES'70 Network Meeting at Santa Fe, New Mexico.

Members of the I.M.S. (Interrelated Math-Science) staff under the direction of Mr. John Arena have continued to develop curricular materials in the Learning Activity Package format. Any request for materials should be directed to the Nova Department of Dissemination.

Dissemination Activities

Article on Learning Activity Packages by Al Rapp at the ES'70 school in Industrial Arts Journal.

Gave curriculum and dissemination materials to the following ES'70 visitors:

1) Beatrice Brennan - E. F. Shelley Company

2) Troy Nuckols - San Mateo, California

3) Martin Raila - Baltimore City Public Schools

4) Robert Dever - Mineola, New York

5) Fredrick Zusselman - Mineola, New York

6) Dave Poole - Mineola, New York

7) Fletcher Tomic - Mineola, New York

8) Eric Kniflke - Mineola, New York

9) Donald Holquist - Mineola, New York

10) George C. Brandau - Willingboro, N. J.

11) William Ryan, Breathitt County, Kentucky

12) Representative from Bloomfield Hills

Gave presentation using filmstrip and audio tape to the following groups:

1) District IV Industrial Arts - Miami

2) Secondary School Principals Association

Article published in "Visual Communications Journal" titled Individualized Instruction in Graphic Arts.

Sent materials to Dr. Bruce Tuckman, Project SCOPE, Rutgers University.

Sent materials to Dr. James Popham at U.C.L.A.

Exchanged curriculum packages with American Institutes for Research, c/o Mrs. Mary Hoaglund, Research Associate, Cornwell Middle Magnet School, Philadelphia, Pennsylvania.

Sent packages to Dr. Robert Morgan, Florida State University.

Sent out by requests over five thousand "A LAP on Writing Learning Activity Packages" to school systems throughout the nation. We are now in the fifth printing because of the demand.

The I.M.S. staff prepared a brochure describing the project. These were disseminated to all ES'70 Coordinators and to school districts throughout the United States.

Lectured to a group of teachers at Seacrest High School, Delray Beach, Florida about the Organic Curriculum and ES'70.

Worked with Bangor High School, Bangor, Maine, on performance objectives.

Conclusion

The ES'70 Program during its short existence has been of great importance to the continued development of the Nova educational programs. The opportunity to have the ES'70 Coordinator available to attend

conferences and meetings throughout the United States and to have a constant dialogue with 16 other innovative school districts has provided Broward County and the Nova Schools with a wealth of information.

T[illegible] membership of Broward County in ES'70 also must be considered of great benefit to the other schools in the district as well as the United States Office of Education. As noted in the report, a great amount of material was dissemination from Nova to the other 16 schools, much more than was received. As dissemination of Nova materials was one of our prime objectives, ES'70 provided a very viable vehicle for this purpose.

Staff improvement, one of the major goals of the ES'70 program, was another benefit of being a member of this network. The publication "A LAP on Writing Learning Activity Packages," written by Kenneth Smith, ES'70 Coordinator, has been widely disseminated throughout the United States. We have just printed an additional 5000 copies of this publication and will continue dissemination of this very important staff development and in-service document.

Although membership in the district was turbulent at times and there was not always accord between the districts and the United States Office of Education and the management consultants, our membership was of tremendous value to us. I firmly believe that if the control of the network had been honestly adopted by all members, the financing of the experiment by the United States Office of Education would have been well spent. This attempt at a consortium of school districts to develop and improve education within their districts in a cooperative manner controlled by public school people should not pass without noting the

the changes in the individual districts within the network. I believe that consortiums such as this have a greater impact on educational than do research and evaluation by institutions of higher education.

APPENDIXES

- APPENDIX A -

A LAP ON WRITING LAPS

By

KENNETH T. SMITH - ES'70 COORDINATOR

BROWARD COUNTY BOARD OF PUBLIC INSTRUCTION

Fort Lauderdale, Florida

November 1969

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THE BIRTH OF A PACKAGE

As teachers endeavored to individualize instruction, the need for the following was realized:

1. A way to let students know what they needed to learn.
2. A way to let students know how they could learn it.
3. A way for students to evaluate their own progress.

The following were developed in order to answer these needs:

1. A scope and sequence (check lists of necessary skills and concepts) in each discipline. (The sequence was not necessarily rigid.)
2. Tests to determine which skills and concepts each student already possessed.
3. Lists of various materials and methods by which students could learn.
4. Evaluative methods by which students could judge their own progress.
5. Evaluative methods by which teachers could judge student progress.

As these materials were developed, it seemed more expedient to compile materials dealing with the same concept together in a "package". The students could learn on their own, at their own pace through the activities appropriate for them.

These compiled materials were named Learning Activity Packages. They were nick-named "LAPs".

Acknowledgements to:

ALFRED RAPP:
Educational Analyst
Computer Applications Inc.
Silver Springs, Maryland

for his imput on the first two generations of the"LAP on LAPs" while a supervisor at Nova Schools, Fort Lauderdale, Florida

RICHARD J. BROEKHUIZEN:
Graphics Instructor
Nova High School

for the use of his learning activity package on design and layout as presented to his students at Nova High School, Fort Lauderdale, Florida

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Reading Specialist
Nova Elementary Schools

for her expertise as an editor and making the manuscript coherent

MARILYN LASKEY:
Florida Atlantic University

for her wit, imagination and constant pushing for me to complete this package

PREFACE:

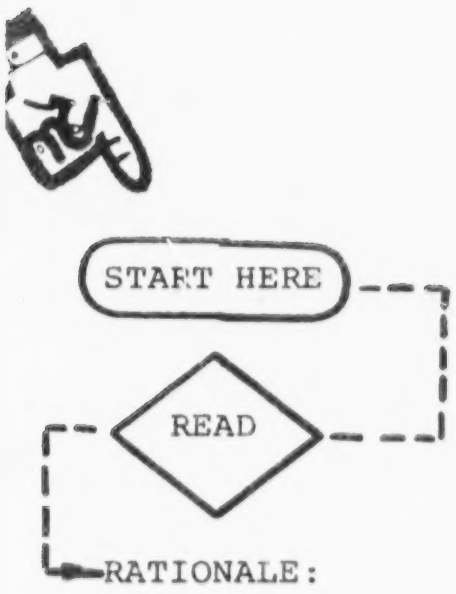
The learning activity package is a highly structured programming of learning materials with three essential and unique characteristics.

First, the teacher is built into the lap as an integral and indispensable part. He now fills the roles of guidance person, human relations person, confidant and, to a lesser degree, dispenser of information and evaluator.

Second, there are built into the package opportunities for the student to make choices. He may choose to take the self-test or go directly to assignments within the lap. He may choose which assignments to do for a specific objective, within the framework of those offered; and he may choose to work to a greater depth if he so desires.

Third, the components of the lap are highly structured. At first thought, a person would say that highly structured means little or no room for the individual and his special needs, but the reverse is true of the lap.

The structure of the lap depends on clearly stated behavioral objectives or goals, which the student understands he must accomplish in order to progress. Also, the lap contains a highly structured assortment of media, modes and learning levels so that an individual student can choose a path most suitable to him in meeting the objectives and, within certain restrictions, the depth to which he will work.



A unique characteristic of much of education has been its role in working with the individual, treating a member of a class as a person with special capabilities, problems and desires.

The learning activity package, or "lap" as it is known, is a promising development which will allow all discipline areas to build into its programs a variety of learning situations to accommodate the many different abilities, desires and learning styles of our students. It provides the opportunity and means for dealing with the low - average - and high-ability student in a single class situation and still gives all the students meaningful learning experiences.

Just How Do I Write A Lap?

It is assumed that you have a scope and sequence and/or a concept, principle or primary idea which you want to develop into a lap or laps.

It is the purpose of this "Lap on Writing a Lap" to provide you with the knowledge and skills necessary to achieve this goal.

If you do not have a scope and sequence or concept, principle or primary idea for which you intend to construct a lap----------

STOP-- Go back and construct a Scope and Sequence.

OTHERWISE---

TURN THE PAGE AND READ THE OBJECTIVES

READ

OBJECTIVES:

AT THE CONCLUSION OF THIS PACKAGE YOU WILL BE ABLE TO:

	Activity and Information Page Number
1. Using your scope and sequence in the specific subject area you teach; write a rationale for a specific concept, phase or primary idea.	12
2. Using the above rationale of the concept, phase, or primary idea write measurable student objectives by which the student will be able to demonstrate competence to your satisfaction.	18
3. Using your completed objectives develop a performance test covering all your objectives.	21
4. Using the flow diagram technique, you will develop the system a student can take to go through your developed lap.	25
5. For each completed objective, list in writing a minimum of 3 activities utilizing a different media and/or mode for each activity.	26

YOU GET TO MAKE A CHOICE

If you feel you can meet the above objectives at this time turn to the next page and take the self test.

OR

If you feel you cannot meet the above objectives at this time turn to page 7 and read the remainder of this package.

SELF TEST:

1. Choosing a concept, phase or primary idea from your scope and sequence, write a rationale for that specific concept, phase or primary idea on a 3" x 5" index card.
2. Write as many student objectives in behavioral terms as you feel are needed to adequately cover the concept you are trying to convey.
3. Using the behavioral objectives you developed, write a self test covering all objectives. Write each question on a 3" x 5" card.
4. List three activities, one being audio-visual, for each objective given. Give the title, author or producer, publisher or manufacturer, edition, and specifics (i.e. black & white film; color slides w/audio tape, length of operational time). Place on a 3" x 5" card.

   Optional:

   If information is not available in ready sources you may write enough information to cover your objectives. Explain technical terms or provide a glossary for the individual to refer to. Write this on 8 1/2" x 11" paper.
5. Using all of your answers for questions 1-4 develop a flow chart a student could use to complete your package from start to finish.

SUBMIT YOUR COMPLETED LAP TO.....

TOGETHER YOU WILL CHECK IT.

INFORMATION

Structurally, the lap is made up of the following components:

(1) Rationale - an explanation of what, why and where this lap fits into the total scheme. This rationale is short and must be easy for the student to read and comprehend. It must be free from educational jargon, which is most often meaningless to a student.

(2) What are Objectives (behavioral goals)?

Objectives must contain the following information:

1. Conditions
2. Behavior
3. Success Criteria

Conditions are those aspects of the performance situation which represent the "givens" or environment when the objective is performed. Special factors that should or should not be allowed to interfer with the student while he is performing the desired behavior should also be stated. Conditions are analyzed into four elements:

1. the tools, equipment, and/or special clothing that the student will use (or may not use)
2. the special aids or manuals the student may use (or may not use)
3. any special physical or social situation in which the performance will occur (or not occur); and
4. any special personal physical demands on the student while performing the behavior.

Conditions are used as a "quality control device". They are not expected to belabor the obvious but to state all the "givens" for the objective that was not obvious and which might affect the behavior in any significant way.

Behavior - The behavior is defined as what the student will actually do to show the instructor or others that he has acquired the learning the objective is concerned with. It is possible for the behavior to be as simple as stating a fact from memory, or to be as complex as completely breaking down and reassembling a lawnmower engine. The behavior is a statement of what the learner does, how he does it, and what results from his actions. The standard of communication in stating behavior must be that any other instructor in the same subject area should be able to read the objectives' description of the behavior and understand it. The use of "general" verbs must be precluded and specific action verbs demanded.

Success Criteria (TEST) - The success criteria is defined as the standard to which the required behavior must be performed, how it will be evaluated, and who will evaluate it. Possible things to be included in preparing success criteria are:

1. stating a time limit within which the behavior must be performed;
2. giving a number, percentage, or proportion of test items that must be answered or performed correctly to be judged as passing;
3. stating the actual responses that would be considered acceptable; and

4. stating who will judge or evaluate the performance as successful

The major problem in developing good success criteria is to avoid subjectivity. This can be accomplished by being quite exact about what the behavior to be performed is, as well as specifying those things that the student might do which would be unacceptable.

An important consideration for determining success criteria is that the performance not run an indefinite length of time. After you know the student can do the behavior desired he should pass the performance objective. Then it is a matter of motivation whether or not the student practices the skill he knows.

(3) Self-test- Here the student is given the opportunity to measure his ability at meeting the objectives of the lap. This self-test is a choice item for the student; i.e., he may or may not take the test, depending on his feeling of confidence in meeting the objectives. The self-test serves several purposes for the student. Should he be lacking in ability to meet some or all of the objectives of the lap, the self-test will graphically demonstrate the areas of weakness and give him direction to the areas of study and activity which will help him become competent.

Should he already be familiar with the materials covered in the lap, he can demonstrate this to himself, for he will also evaluate his success on the test from a key which is provided.

In cases where the student successfully completes the lap self-test, options are built in for him: options such as having an individual conference with the instructor, usually to discuss the package objectives, opportunities for depth study of the area covered by the lap, or the opportunity to take the teacher evaluation and, if successful, to progress to the next package without waiting for a class to catch up.'

(4) Should a student elect to go directly into the package body, the fourth component of the lap, or be directed there as a result of the self-test or a student-teacher conference, he will find a variety of activities and assignments to aid him in acquiring the proficiency and skills to meet his objectives. Within this variety of activities and assignments, he is free to select the ones which he feels will best aid him in meeting the objectives.

In the assignments and activities, a multitude of media (multi-media) and modes (multi-modes) is employed to make the package meet the specific needs of an individual student.

By multi-media is meant a variety of information and stimulant sources, such as readings from various reference books written at different reading levels, audio and video tapes, movies, slides, filmstrips, self-demonstrations, written assignments, physical activities, etc. It is from this panorama of built-ins that the student makes his choices.

By multi-modes is meant a variety of planned interactions between staff members and students, students and students or students and materials. These modes might take the form of the

presentation mode (minimum verbal interaction), discussion mode (maximum verbal interaction) or the independent study mode (student - material interaction).

When the student feels confident that he is ready to meet the objectives of the lap, he is free to take or retake the self-test as a cross check, or directly to take the teacher evaluation.

(5) The final evaluation, which is graded by the teacher, is built to measure the objectives as stated in the lap and not some inferred idea in the back of the teacher's mind. In this way the teacher and the lap "play fair" with the student.

There is no limit to the applications of the lap as an educational tool in all subject areas. It serves well in the teaching of skills, concepts or related information, but, more important, it allows each student to be not merely a part of a group, but a unique individual.

OBJECTIVE 1:

Using your scope and sequence in the specific subject area you teach, write a rationale for a specific concept, phase or primary idea.

Make a selection of one or more of the "assignment 1 choices" to help you meet objective 1.

Assignment 1 - Choose one or more of the following:

Text Media:

Choice A. Preparing Instructional Objectives by Robert F. Mager, Fearon Publishers, Palo Alto, California - 1962.

Choice B. Read page 7 covering rationale in information section of this lap.

Audio-Visual Media: Choice C: A Curriculum Rationale filmstrip presentation in conjunction with audio tape. This series of filmstrips are produced by Vimcet Associates.

At the conclusion of this program you will be able to:

a. Distinguish between educational questions according to whether they are primarily related to ends or means.
b. Correctly match descriptive phrases with components of the curricular model.
c. Fill in a blank diagram depicting major components of the curricular model treated in the program. Use response sheets and post tests available with this program.

Assignment 2 - Choose one of the following situations provided below and write a rationale for that specific concept, phase or primary idea:

Choice A: Write a rationale for the concept of logic relating to Algebra. The student age is based on the 10th level (ungraded).

Choice B: Write a rationale for the concept of fastening material. The situation is covering the student age based on the 11th year level (ungraded).

Choice C: Write a rationale for the concept of measurement. The situation is covering the student age based on the 9th year level (ungraded).

Compare your rationale with those on the next page.

TURN TO THE NEXT PAGE

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RATIONALE EXAMPLES

Choice A:

SOME REASONS FOR STUDYING LOGIC

1. Since logic is regarded as a science instead of an art, its study will give you an understanding of the nature of the principles of deductive reasoning.

2. It should assist you in improving your powers of reasoning so that you will be able to recognize the difference between good and bad evidence for a belief or conclusion.

3. It should enable you to become aware of the differences between persuasion through various psychological means as opposed to rational conviction through evidence and logical reasoning. This should put you on guard against propaganda, and enable you to evaluate and resist sensational advertising.

4. It should enable you to develop a critical attitude toward the assumptions of many of your own and others' arguments in such fields as politics and social sciences.

5. It should familiarize you with a vocabulary of logical terminology that exists throughout our literature, not only in science and mathematics.

Choice B:

In our present technological culture, some of the main accomplishments of man are the products of his industries. The products are materials which have been manipulated to meet the specifications he has set.

When we manipulate a material, there are basically three things which can be done: fastening, parting and forming the material.

Usually we use a combination of the three to accomplish our end goals, the products. However, we must understand each of the three independently before we can deal with the whole of manipulation of material.

The purpose of this package is to introduce you to the area of fastening and some of the basic skills and terms associated with the area.

You will find the information and skills covered by this package of value to you in other packages within your sequence as well as in everyday [illegible] of materials and products

Choice C.

The study of science would have progressed very little without the development of measuring instruments and techniques. In fact, we may safely say that the progress of science has been directly related to the progress made in the field of measurement.

In this LAP you will learn the basic principles and use of several representative measuring instruments. You will make measurements of mass, length, and time with varying degrees of precision. It is interesting to note that many quantities such as area, volume, temperature and pressure which we normally think of as being measured directly can be derived from one or more of these basic measurable quantities.

How do you compare with the examples given?

Rating: ____Good ____Not so good

If you rated yourself not so good see corrective options below:

If you rated yourself good turn to page 18 and proceed with Objective 2.

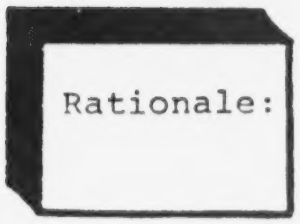
Corrective Options:

___1. I will rewrite my rationale below:

Have the teacher evlauate your rationale.

___2. I will contact the teacher immediately for additional help in understanding what a rationale REALLY is.

Assignment 3. On a 3" x 5" card or space provided below write a rationale for a specific concept, phase or primary idea in your subject matter area.



Evaluate your rationale--

Have the instructor evaluate your rationale--

Objective 2:

Using the rationale of the concept, phase, or primary idea, write measurable student objectives by which the student will be able to demonstrate competence to your satisfaction.

Make a selection of one or more of the "Assignment 1 choices to help you meet objective 2.

Assignment 1

Choose one or more of the following:

Text Media:

Choice A. Preparing Instructional Objectives by Robert F. Mager, Fearon Publishers, Palo Alto, California - 1962.

Choice B. Read pages 7-9 covering behavioral objectives in the information section of this lap.

Audio Visual Media:

Choice C. "Educational Objectives" filmstrips presentation in conjunction with audio tape and response sheet produced by Vimcet Associates

At the conclusion of this program you will be able to:

a. Distinguish between behaviorally and non-behaviorally stated instructional objectives.
b. Convert non-behavioral objectives to a form specifying student post-instruction behavior.

Choice D. "Appropriate Practice" filmstrip presentation in conjunction with audio tape and response sheet produced by Vimcet Associates.

a. At the end of the program you will be able to distinguish between written examples of pupil activities according to whether they are equivalent practice, analogous practice, prerequisite tasks, or irrelevant to a given objective.
b. Given instructional objectives or writing your own objective you will be able to write out learning activities which are equivalent practice, analogous practice, and prerequisite tasks for the objectives.

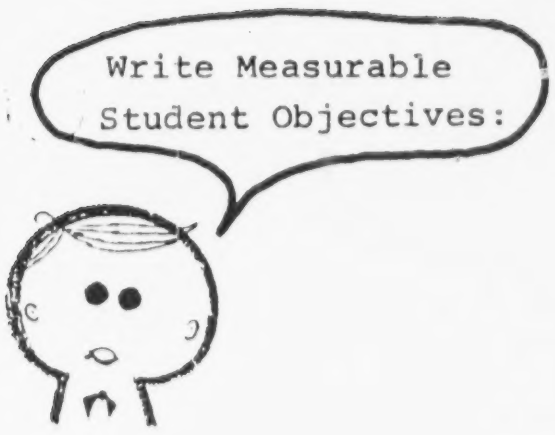
Choice E.

"Selecting Appropriate Educational Objectives" filmstrip presentation in conjunction with audio tape and response sheet produced by Vimcet Associates.

Assignment 2:

The Objectives for this program are:

a. You will be able to distinguish correctly between written objectives representing the cognitive, affective, and psychomotor domain of student behavior.
b. Having properly identified cognitive objectives, you will be able to classify them as 1) the lowest or 2) higher than the lowest level of the cognitive domain.
c. Given a relatively unstructured task of writing objectives for a single concept, phase or primary idea, you will tend to write cognitive objectives at a higher level than would be the case prior to viewing the program.



Compare your objectives with the examples given on page

Rate your objectives: ___Good ___Not so good

- If you rated yourself good turn to page 21 in this Lap and proceed with objective three.
- If you rated yourself not so good read "Preparing Instructional Objectives", Mager , and take the self test on pages 54-60. Evaluate your own test.

Objective 3:

Using your completed objectives develop a performance test covering all your objectives. Make a selection of one or more of the "Assignment 1 choices" to help you meet objective 3.

Assignment 1. Choose one or more of the following:

Text Media:

Choice A. "Preparing Instructional Objectives" by Robert F. Mager, Fearon Publishers, Palo Alto, California - 1967.

Choice B. "Developing Attitude Toward Learning" by Robert F. Mager, Fearon Publishers, Palo Alto, California - 1968.

Choice C. "Developing Vocational Instruction" by Robert F. Mager & Kenneth M. Beach, Fearon Publishers, Palo Alto, California - 1967.

Choice D. Read Page 9 covering self test in the information section of this lap.

Audio-Visual Media:

Choice E. "Evaluation" filmstrip presentation in conjunction with audio tape and response sheet produced by Vimcet Associates. The specific objectives of this program are:

a. You will be able to design both formal and informal pre-assessment procedures when given an objective.
b. You will be able to construct a test item which measures a given objective.
c. Given some test data, you will be able to make defensible inferences from the information

Audio-Visual Media:

Choice F

"Modern Measurement Mehtods" filmstrip presentation in confunction with audio tape and response sheets produced by Vimcet Associates.
After the conclusion of this program you will be able to:

a. Describe the principle purpose of 1) criterion - referenced testing and 2) norm - referenced testing.
b. Identify whether selected measurement operations are most appropriate for criterion referenced or norm referenced.
c. Properly classify descriptions of measurement devices as either criterion referenced or norm referenced.
d. Distinguish between measurement situations which require criterion referenced or norm referenced measures.
e. Describe the basic procedure, as presented in the program, for constituting tests by item sampling.

Choice G

Establishing Performance Standards filmstrip presentation in conjunction with audio tape and response sheets produced by Vimcet Associates.
At the conclusion of this program you will be able to perform the following behaviors:

a. When given a statement of an objective, to identify the portion of it, if any, which describes a student performance standard (a level of achievement which enables instructors to identify those students who have satisfactorily achieved the objective.)
b. When given an objective, to identify the portion of it, if any, which specifies the class performance standard (achievement levels used judge the adequacy of instruction).
c. When provided with an objective, to construct performance standards of the two types listed above using both quantitative and qualitative
22 standards.

Choice H

Perceived Purpose filmstrip presentation in conjunction with audio tape and response sheets produced by Vimcet Associates.
The objectives for this program are:

a. When developing a Learning Activity Package, you will include a greater number of "perceived purpose-type" activities after viewing the program than you included before exposure to the program.
b. Given written descriptions of teachers engaging in various activities, you will be able to distinguish between various teachers who are not promoting perceived purpose and, if so, which of the four techniques is being used.

Choice I

Defining Content for Objectives filmstrip presentation in conjunction with audio tape and response sheets produced by Vimcet Associates.
At the conclusion of this program you will be able to:

a. Describe the desirable relationships an objective should have to test items.
b. Discriminate between objectives which possess content generality and those which do not.
c. Convert objectives which are equivalent to test items to those which possess content generality.

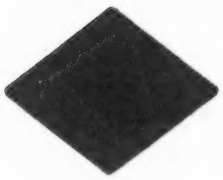
Choice J

"Analyzing Learning Outcomes" filmstrip presentation in conjunction with audio tape and response sheets produced by Vimcet Associates.
After the conclusion of this program you will be able to:

a. Describe the strategy recommended in the program for deciding on an instructional sequence.
b. Formulate relevant entry and en-route behaviors for given or formulated instructional objectives.
c. Generate more entry and en-route behaviors than you were able to prior to completing the program.

Assignment 2.

Develop a performance test covering the objectives you wrote on a separate sheet of paper. Compare each test question with your objectives and code the question to the objective it relates to.
Evaluate yourself. At this time if you find that you have written a question that is not covered by an objective re-evaluate your objectives.



After successful completion of objective three turn to page 25 and proceed with objective four.

Objective 4

Using the flow diagram technique, you will develop the system a student can take to go through your developed lap.

Make a selection of one or more of the "Assignment 1 choices" to help you meet objective 4.

Assignment 1

Choose one or more of the following:

Choice A. "Developing Vocational Instruction" by Mager & Beach, Jr., Fearon Publishers.

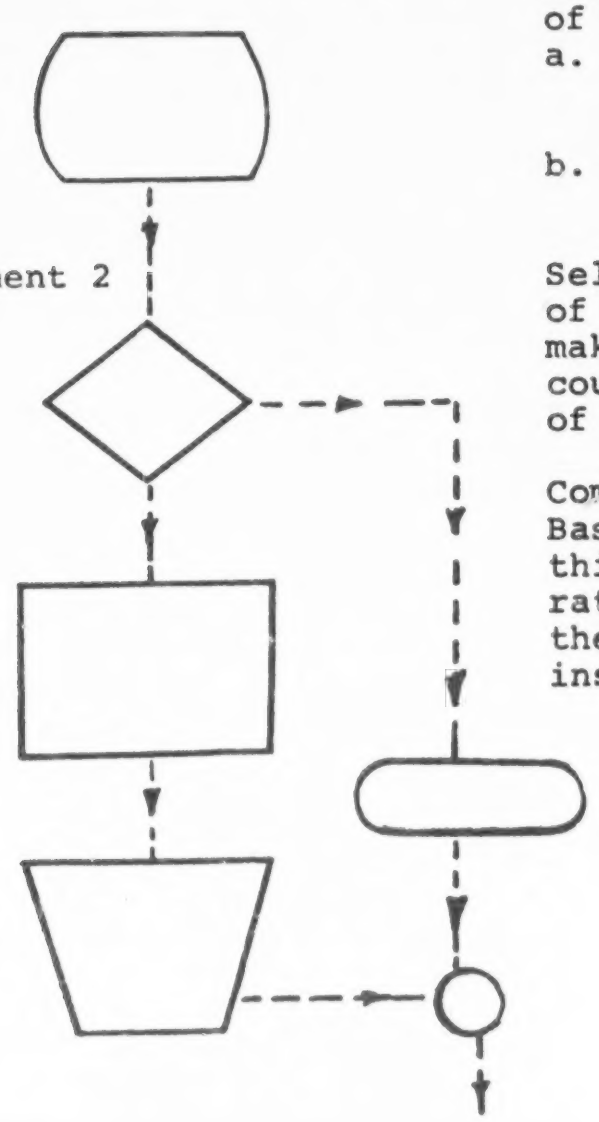
Choice B. Read page 27 showing a flow chart in the information section of this package.

Audio-Visual Media:

Choice C. "Systematic Instructional Decision-Making" filmstrip presentation in conjunction with audio tape and response sheet. Vimcet series Palo Alto, California. At the conclusion of this program you will be able to

a. List which instructional activities to include in a teaching sequence and
b. evaluate whether the instructional sequence is effective.

Assignment 2



Select one of your previous series of objectives that you wrote and make a flowchart to see how a student could proceed through this series of objectives.

Compare your flow chart with the Basic Flow Chart in Appendix A of this package and give a written rationale for the differences in the two flow charts. Have the instructor evaluate your flow chart.

Objective 5:

Using your completed objectives; list in writing a minimum of three activities, utilizing a different media and/or mode for each objective.

Make a selection of one or more of the "Assignment 1 choices" to help you meet objective 5.

Assignment 1 - Choose one or more of the following:

Text Media:

Choice A. Proceed to your resource center and look up books available in the card index file pertaining to activities and/or mode for the specific concept, phase or primary idea you have developed. Write these into the package you are developing.'

Choice B. List and preview three available slide, filmstrip, single concept loop films or motion pictures directly related to the specific concept, phase or primary idea you have developed. Write these into the package you are developing as an activity.

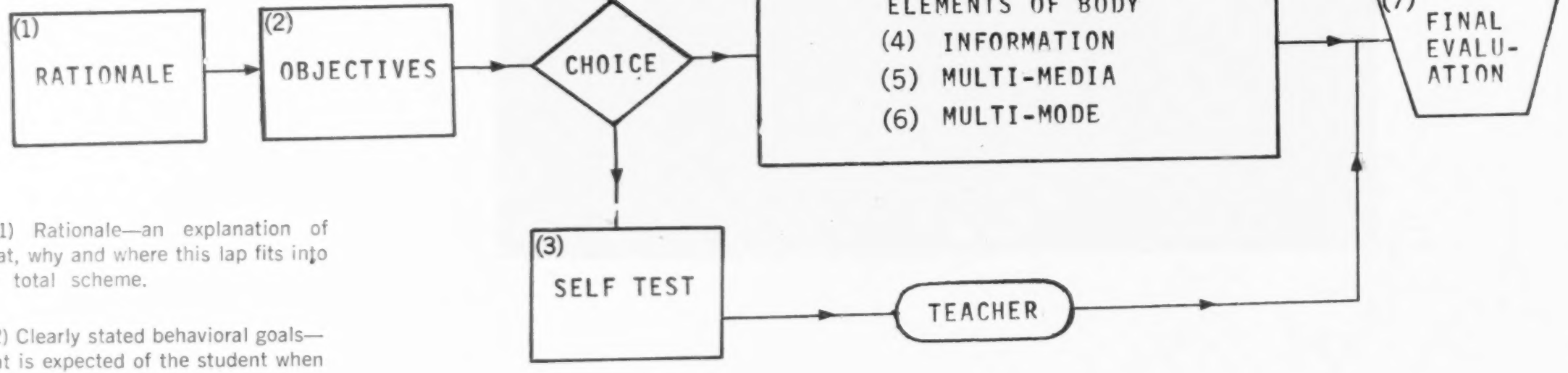
Assignment 2 - Optional

*Develop a visual presentation using either slides, overhead transparencies or single concept loop film having an audio track availabler with the presentation. This must be directly related to the idea you have developed.

*Resource-LAP on Preparing Slides & Audio Tape - by Kenneth T. Smith, ES'70 Coordinator.

TEACHERS PRIMARY
RESPONSIBILITY AREA

BASIC FLOW CHART



(1) Rationale—an explanation of what, why and where this lap fits into the total scheme.

(2) Clearly stated behavioral goals—what is expected of the student when he completes the lap.

(3) Self-test—here the student is given the opportunity to measure his ability at meeting the objectives of the lap.

(4) Should a student elect to go directly into the package body, the fourth component of the lap, or be directed there as a result of the self-test or a student-teacher conference, he will find a variety of activities and assignments to aid him in acquiring the proficiency and skills to meet his objectives. Within this variety of activities and assignments, he is free to select the ones which he feels will best aid him in meeting the objectives.

(5) By multi-media is meant a variety of information and stimulant sources, such as readings from various reference books written at different reading levels, audio and video tapes, movies, slides, filmstrips, self-demonstrations, written assignments, physical activities, etc. It is from this panorama of built-ins that the student makes his choices.

(6) By the multi-modes is meant a variety of planned interactions between staff members and students, students and students or students and materials. These modes might take the form of the presentation mode (minimum verbal interaction), discussion mode (maximum verbal interaction) or the independent study mode (student-material interaction).

(7) The final evaluation, which is graded by the teacher, is built to measure the objectives as stated in the lap and not some inferred idea in the back of the teacher's mind. In this way the teacher and the lap "play fair" with the student.

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Appendix B

DESIGN & LAYOUT

SAMPLE LAP

NAME_____

MOD_____

The following information was taken from a Learning Activity Package presently in use at Nova High School Industrial Arts program. Keep in mind that this Sample LAP represents a portion of a total LAP.

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RATIONALE:

The fundamental purpose of all design is to attract and hold the attention of the reader. The design of all printed material should also impress and stimulate the observer.

The success of all printed matter, such as advertisements, posters and displays, depends upon their design and layout.

In this Learning Activity Package you will study the principles of good design and layout as they apply to printed matter and you will study the correct techniques and procedures for completing a finished layout

Go on to the next page and read the objectives carefully!!!!!!!

OBJECTIVES:

1. Given the terms formal layout and informal layout you will be able to define each either orally, in writing or by demonstration.

2. Given the five principles of design you will be able to define at least four - either orally, in writing or by demonstration.

3. Using good design principles and either formal or informal layout you will be able to design and layout a name tag containing your name, Nova High School, Visual Communications and your student number.

4. Using either formal or informal layout and good design principles you will be able to design and layout each of the following to contain a cut for printing in one color and type matter for printing in a second color.
   A. Business card to fit on a standard 88 B card
   B. Note pad with a maximum finished size of 5" x 8"

5. Given fill-in questions concerning the techniques and procedures of layout you will be able to correctly answer 4 of 5.

OPTIONS: Check your selections

_____ If you feel you can meet the above objectives at this time turn to pages 4 and 5 and take the self test.

_____ If you feel you cannot meet the above objectives at this time check one or more of the following approaches.

1.____ View slide series number 101 entitled "DESIGN LAYOUT". This slide series is accompanied by an audio tape.

2.____ View video tape recording entitled "DESIGN AND LAYOUT" which is on file in the T.V. Studio.

3.____ Read one of the suggested reading sources for each objective:

1.____ Graphic Arts by Carlsen

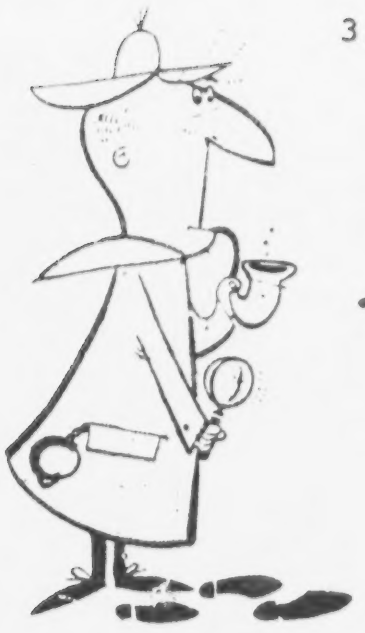
objective 1 -- page 42
objective 2 -- page 42
objectives 3, 4 and 5 -- pages 42-45

2.____ Layout by Felton

objective 1 -- pages 19-20
objective 2 -- pages 67-87

3.____ Printing Layout and Design by Delmar Publishers

objective 1 -- pages 23-24



See your instructor before proceeding with your above selections.

NOTE:

1. In the Relief package (102) you will be required to compose the type for the name tag and your choice of the business card or the note pad.

2. The cut you use will be carved from a linoleum block in the Relief package.

3. In package four, Relief Makeready and Presswork, you will print the name tag and your choice of the business card or the note pad.

SELF TEST:

Question 1: Define each of the following terms in writing. You may also use a sketch if you feel it is necessary.

1. Formal Layout

2. Informal Layout

Question 2: Define each of the following terms in writing.

1. Proportion

2. Balance

3. Unity

4. Contrast

5. Rhythm

Question 3: Complete each of the following statements concerning the techniques of making a layout by placing the correct word or words on the line provided.

1. A _____layout is generally a sketch that shows the general size and shape.

2. The finished layout should be prepared to _____size.

3. Dark shaded areas on a rough layout indicate the use of _____type.

4. The finished layout is the printer's _____.

5. On the rough layout small type areas are indicated by _____ _____areas.

Now that you have completed the self test see your instructor for the correct answers. Use the chart below to score your self test.

The chart below indicates the question number, the possible score for each question and the minimum score permitted on each question. Write your score for each question in the space provided.

Question	Possible	Minimum	Your Score
1	2	2	
2	5	4	
3	5	4	

OPTIONS: Check your selection

_____ If you have not read the package, viewed the slides, viewed the video tape or read any of the suggested sources and have scored at least the minimum on each of the questions see your instructor for the purpose of discussing your next step in this package.

_____ If you have not read the package, viewed the slides, viewed the video tape or read any of the suggested sources and have scored less than the minimum on any of the questions turn to pages -- and -- and check the approaches that you wish to use to obtain the necessary information.

_____ If you have read the package and/or viewed the slides, video tape, read any of the suggested sources and have scored at least the minimum on each of the questions see your instructor for the purpose of discussing your next step in this package.

_____ If you have read the package and/or viewed the slides, video tape, read any of the suggested sources and have scored less than the minimum on any of the questions schedule a student-teacher conference.

SAMPLE ACTIVITY:

ACTIVITY ASSIGNMENT SHEET

1. Prepare a rough and finished layout for each of the following. Work sheets are provided after this activity assignment sheet for making the layouts.

   A. A name tag for printing in one color on 88 B cards containing your name, High School, Visual Communications and your student number.

   B. A business card containing a cut for printing in one color and type matter for printing in a second color on 88 B cards.

   C. A note pad with a maximum size of 5" x 8" containing a cut in one color and type matter in a second color.

2. After completing assignment 1 turn in the entire LAP for evaluation. Be sure your name and mod numbers are on the front cover of the LAP. After evaluation the LAP will be returned to you for storage in your notebook. Do not lose this LAP as you will need it for completing the assignments in LAP 103.

3. See your instructor for directions on taking the post-test Number 101. This test will include all objectives that have been presented in this learning activity package.

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FILMSTRIPS & AUDIO TAPES

Vimcet Associates, P.O. Box 24714, Los Angeles, California 90024 (1968).
Series Title:

a) Systematic Instructional Decision-Making
b) Educational Objectives
c) Selecting Appropriate Educational Objectives
d) Establishing Performance Standards
e) Appropriate Practice
f) Perceived Purpose
g) Evaluation
h) A Curriculum Rationale
i) Defining Content for Objectives
j) Identifying Affective Objectives
k) Analyzing Learning Outcomes
l) Knowledge of Results
m) Teaching Units and Lesson Plans
n) The Teaching of Reading
0) Discipline in the Classroom
p) Modern Measurement Methods
q) Instructional Supervision:; A Criterion Referenced Strategy
r) Experimental Designs for School Research

- APPENDIX B -

DEVELOPING AUDIO-VISUAL MEDIA

FOR

LEARNING ACTIVITY PACKAGES

PREPARED BY
KENNETH T. SMITH
ES'70 COORDINATOR

NOVA SCHOOLS
FT. LAUDERDALE, FLORIDA

MAY 1969

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START HERE

READ

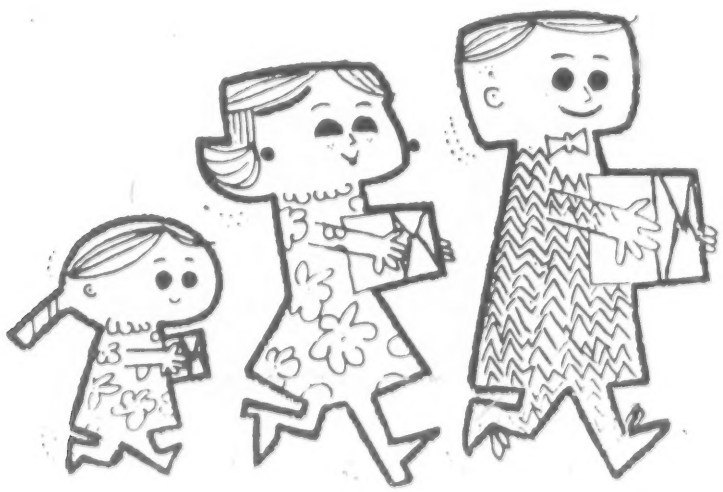
RATIONALE:

Individualized instruction must utilize many avenues of approach for students of varying abilities. One method of implementing the individualized approach is the use of audio-visual presentations, which have definite advantages for individuals with low reading abilities. This is also a channel to students who need to have information presented in a form other than reading to clarify the position of the stated objectives. The audio-visual device, however, must be congruent with the Learning Activity Package.

Slides and audio tapes, when carefully prepared and properly used, can:

1. Increase understanding of the objectives
2. Add interest to a subject
3. Lengthen the retention time of information
4. Teach a skill effectively
5. Contribute to a desirable attitude
6. Stimulate people to action
7. Offer experiences not easily obtained in other ways
8. Increase the instructional efficiency of an individualized system.

It is the purpose of the LAP to assist you in the development of slides and audio presentations relevant to the specific phase, primary idea or concept of your curriculum. It is preferable to complete the objectives on writing Learning Activity Packages. before starting this package.



Turn the page and read the Objectives.

READ

OBJECTIVES:

AT THE CONCLUSION OF THIS PACKAGE YOU WILL BE ABLE TO:

	Activity and Information Page
1. Construct a planning board* and planning cards*, using available material.	Page 5 Page 12
2. List a sequence of slides that could be constructed to cover the objectives in your learning activity package.	Page 6
3. Construct and fabricate rough design ideas and information for each specific slide of your intended series and place them in sequence, using the planning cards.	Page 7
4. Develop your rough design to camera-ready (finished)copy, using available material, equipment and resources.	Page 8
5. Compile all camera-ready (finished) copy and photograph these on either color or black and white positive film.	Page 9
6. Develop and prepare slides from your exposed film, or have them prepared commercially.	Page 10
7. Write a script correlating with your sequence of slides and narrate the script on an audio tape.	Page 11

*If local facilities have these available, proceed to objective 2.

YOU GET TO MAKE A CHOICE

If you feel you can meet any or all of the above objectives at this time, turn to page 4 and take the self test.

OR

If you feel you cannot meet the above objectives at this time, turn to page 5 and start progression through the remainder of the package.

SELF TEST:

1. Construct a planning board and planning cards.

2. List a sequence of slides that you are going to construct to cover the objectives in your Learning Activity Package.

3. Construct and fabricate the rough design ideas for each specific slide of your intended series on planning cards. Fill in the appropriate information on each card.

4. Take each planning card and construct the camera ready copy.

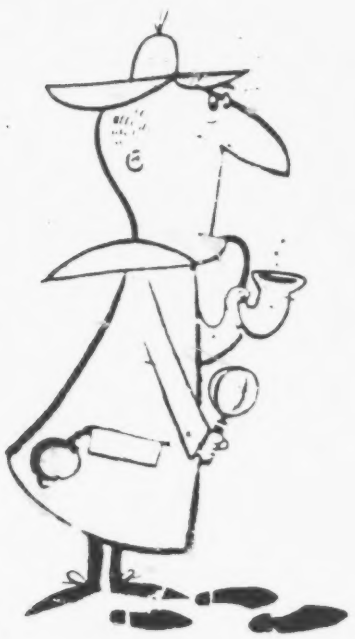
5. Photograph all camera ready copy.

6. Develop and prepare slides from your exposed film, or have them prepared commercially.

7. Write a script correlating with your sequence of slides and narrate the script on audio tape.

EVALUATION:

Have at least two people view your completed slide/audio tape presentation after reading your LAP and have them fill in the evaluation form on page 19.



OBJECTIVE 1:

Using available material, construct a planning board and planning cards. (If local facilities already have these available, proceed to objective 2).

Make a selection of one or more of the "assignment 1 choices" to help you meet objective 1.

Assignment 1 - Choose one or more of the following:

Text Media:

Choice A. — Read pages 5-6 in Producing Slides and Filmstrips (Kodak Audio Visual Data Book S-8).

Choice B — Planning and Producing Visual Material (Kodak Pamphlet No. S-13).

Choice C — Audio Visual Planning Equipment (Kodak Pamphlet No. S-11)

Choice D — Planning and Producing Audio Visual Materials (Kemp, Jerrold A., Chandler Pbulishing Co., San Francisco, California 1963. Pages 17-18)

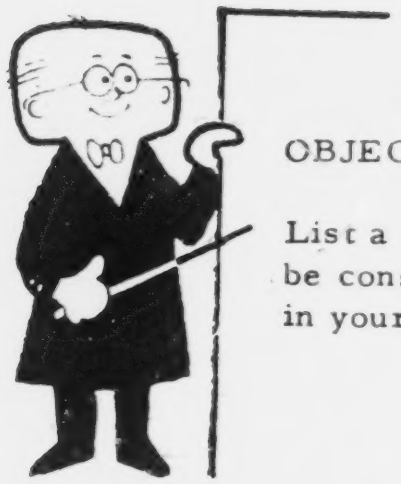
Choice E — Page 12 in the information section of this package.

Audio Visual Media:

Choice A — Effective Visual Presentations by Kodak AV Service, Rochester, N. Y.

Assignment 2

Construct a planning board and planning cards.



OBJECTIVE 2:

List a sequence of slides that could be constructed to cover the objectives in your learning activity packages.

Assignment 1 - Choose one or more of the following:

Text Media:

Choice A — Planning and Producing Audio Visual Materials Kemp, Chandler Publishing Co. 1963 Pages 5-20.

Choice B — Read page 13covering use of the planning cards in the information section of this LAP.

Audio Visual: Effective Visual Presentations Kodak AVS Rochester, N. Y.

Assignment 2: List a sequence of slides that you will construct to cover the objectives in your learning activity package.

OBJECTIVE 3:

Construct and fabricate rough design ideas and information for each specific slide of your intended series and place them in sequence, using the planning cards.

Assignment 1: Choose one or more of the following:

Text Media:

Choice A — Basic Titling and Animation Kodak Publication No. S-21 (1965) Pages 9-19; 40-41.

Choice B — Planning and Producing Visual Aids Kodak Pamphlet No. S-13 (1966).

Choice C — Read page 14 covering the fabrication of rough ideas in this LAP.

Audio Visual Media:

Choice A — Effective Visual Presentations Kodak AVS Rochester, N. Y.

Assignment 2:

Construct and fabricate rough design ideas and information for each specific slide of your intended series and place them in sequence, using the planning card.

OBJECTIVE 4:

Develop your rough design to camera-ready finished copy, using available material, equipment and resources.

Make a selection of one or more of "Assignment 1 Choices" to help you meet objective 4.

Assignment 1: Choose one or more of the following:

Text Media:

Choice A — Planning and Producing Visual Aids
Kodak Pamphlet No. S-13 1966
Pages 8-14.

Choice B — Planning and Producing Audio Visual Materials; Kemp, Jerrold A., pages 61-66.

Audio Visual Media:

Choice A — Effective Visual Presentations
Kodak, Rochester N. Y.

Assignment 2:

Develop your rough design to camera-ready (finished) copy, using available material, equipment and resources.

OBJECTIVE 5:

Compile all camera-ready copy and photograph these on either color or black and white positive film.

Select one or more of the "Assignment 1 Choices" to help you meet Objective 5.

Assignment 1: Choose one or more of the following:

Text Media:

Choice A — Producing Slides and Filmstrips Kodak publication No. S-8 1966 Pages 17-40.

Choice B — Planning and Producing Audio Visual Materials Kemp, Jerrold A., Chandler Publishing Co., San Francisco, California, 1963, Pages 37-56.

Choice C: The Fourth Here's How; Kodak Publication No. AE 85; 1967

Assignment 2: Photograph all camera-ready copy on either black and white positive film or color film.

OBJECTIVE 6:

Develop and prepare slides from your exposed film or have them prepared commercially.

Make a selection of one or more of the "Assignment 1 Choices."

Assignment 1: Choose one or more of the following:

Text Media:

Choice A: Kodak Black and White Films in Rolls Kodak Publication No. AF-13 1967; Page DS 24.

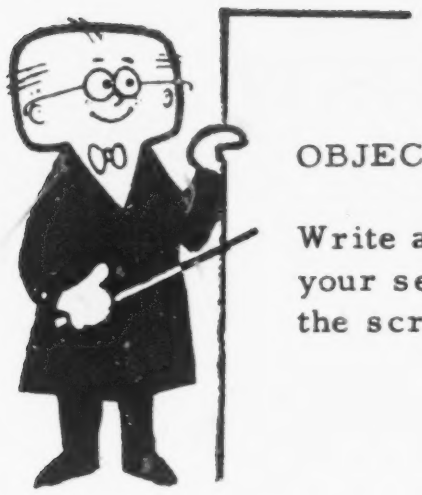
Choice B: Kodak Color Films; Kodak Publications No. E-77; 1961.

Choice C: Planning and Producing Audiovisual Material; Pages 57-60, Pages 87-96.

Choice D: Use data sheets packed with developing kits relevant to the type of film you are developing.

Choice E: Consult the yellow pages of your telephone directory for commercial establishments that will develop your films.

Assignment 2: Develop and mount slides from your exposed films, or send them to be processed commercially.



OBJECTIVE 7:

Write a script correlating with your sequence of slides and narrate the script on an audio tape.

Assignment 1: Read the following:

Text Media: Planning and Producing Audio Visual Materials; Kemp, 1963; Pages 24-33, Pages 76-79.

Assignment 2: Write a script correlating with your sequence of slides and narrate the script on an audio tape.

INFORMATION

PLANNING BOARD AND CARDS

A vital part of producing good audio visual programs is developing a planning procedure to avoid loss in wasted time and effort. Major emphasis must be placed on the planning board and cards to preview in rough layout what the total program will look like.

A planning board can be constructed using an existing tack board in the classroom or by purchasing tack board material. This should be at least four feet by six feet in size to give a desirable amount of area to place the planning cards. Plastic strips are then tacked permanently to the tack board the total width and spaced horizontally at intervals of four and one half inches (the card size is 4 1/4" x 5 1/2"). Using clear plastic strips the full card is available for viewing when inserted in the planning board.

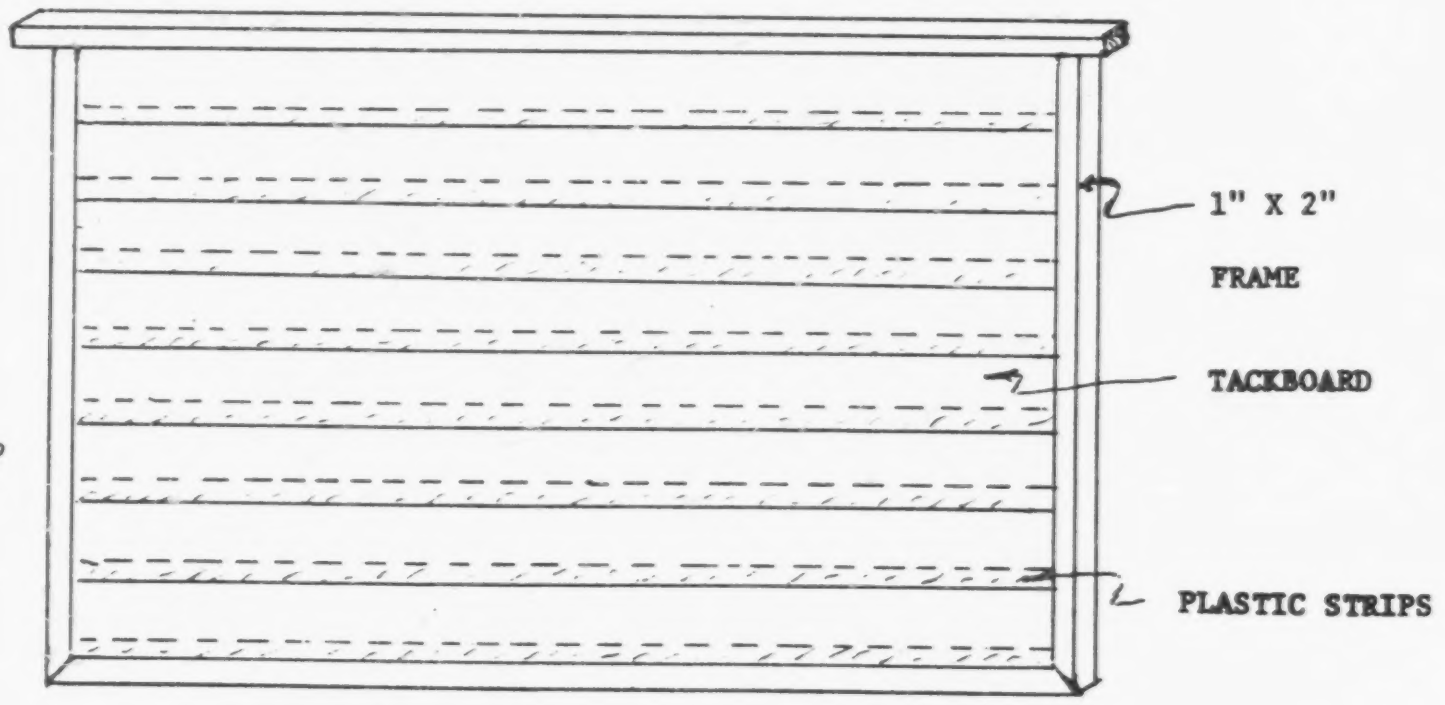


FIGURE 1 PLANNING BOARD

The planning cards can be printed on an offset press or mimeograph machine to keep a uniform format. Each card should have space available to write in the job number, illustration explanation, script to be generated from the specific slide, and what sequence of the series that particular slide is placed. The illustration below gives one type of arrangement that can be used in designing the planning card.

5 1/2"

JOB NO.	ROUGH LAYOUT ILLUSTRATION
ILLUSTRATION INSTRUCTIONS	
SEQUENCE: SLIDE ___ OF __ SLIDES	COMMENTARY

4 1/4"

FIGURE 2 PLANNING CARD

When printing these you can mimeograph four on one sheet of index (card stock) 8 1/2" x 11" and then cut these in half on the length and the width thereby getting 4 planning cards from one sheet.

With the completed rough ideas placed on the planning cards and then inserted on the planning board, it will show at a glance the continuity of the presentation and how the narrative ties in with the visuals. There is no need for an illustration list or a script; all of the information is contained on the planning board.

CONSTRUCTION OF CAMERA-READY COPY

The major consideration should be given to the film format (size) and type of equipment available. If you are using the Kodak Ektagraphic Visualmaker kit, use the dimensions of the base of the copy stand. The Kodak Ektagraphic Visualmaker is probably the easiest system to use as it requires little technical knowledge to operate. A suggestion if you are using color film would be to attach blue flood lamps (available at your local camera shop) instead of the blue dot flash bulbs. These lamps will reduce the total production cost as you eliminate using the more expensive flash bulbs.

For black and white film use the recommended lamp for the specific film you purchase.

When preparing titles you can use rub on letters such as Transfer Type, Zip-A-Tone or other commercially prepared materials. My suggestion would be to invest approximately $15.00 in white letters. These are available in plastic or ceramic material and come in a number of styles and sizes.

Title letters that have no pin or fastening on the back are easiest to use and can be used indefinitely. Simply place them on colored-paper backgrounds and copy the layout vertically. To achieve contrast with white letters and to avoid the dazzling effect that brighter, lighter colors have, use dark, soothing colors for background.

If you use transfer type letters colored black, place these on a white background and photograph with a panchromatic film such as Plus X or Tri X. When the negatives are developed you will have transparent letters on an opaque (black) background. Take a magic marker and place a color over the entire slide. This will reduce the glare and will impart color in the series.

Another application of using your white ceramic letters is adding color to the letters using colored gelatin filters over the spotlight. When you are trying different approaches read as many of the Kodak pamphlets that are available on this subject.

You can photograph materials from books, magazines or pamphlets but remember to avoid copying text (written words) as it will project poorly. If you have a photograph you might want to use this as a background placing title letters on the top surface. Avoid too much action in pictures as it does have a tendency to detract from the title.

Art work can be prepared by using colored construction paper, colored chalk, prepared clip files such as clip tips, or cut outs from magazines. Art work can be as simple as needed to project the message across to the audience or as sophisticated as a more creative individual may wish to take it.

In my own situation, lacking the creative talent, I have relied on colorful magazines, travel brochures, cartoon clippings and any other source I can obtain such as "children playing", "trucks", "desert scenes" and "water scenes" gives me a ready available scope of copy. Cartoons such as "Peanuts" can be filed and used in many cases. If the cartoon is in black and white you can color it with crayons or pencils. There is no limit to what can be found when you start looking.

FILMS AND DEVELOPING

I won't expound on these as it would be more relevant to follow suggestions available in the many publications listed or instructions available with the Kodak Ektagraphic Visualmaker Kit. Remember each film comes with an instruction sheet and these are always kept up to date with changes in the film by the manufacturer.

NARRATION OF THE SCRIPT

Make sure you record at a speed commensurate with your tape recorder if different from the machine you narrate on. It would be useless to record at a speed of 7 1/8 when the recorder you may use to play it back on only has a speed of 3 1/3. If the recorder does not have a separate track for recording a change blimp use a glass and spoon to place a specific noise in the tape to let the student know when to change.

Another method used is keeping the script correlating with the time elements available on the Kodak Carousel Projector. It can be set up in a sequence of 5, 6, 7 seconds remembering that if you start with five seconds all slides must be narrated at five second intervals.

Keep your slide presentation in the time realm of 10-15 minutes. Longer periods of time have a tendency to lose the total effectiveness of the presentation. Don't overuse any media or mode. Keep the program flexible and available. If the student has to set up the total projector and tape recorder from scratch it will place too many barriers and will not be used effectively

What the Equipment Does and How It Works

The KODAK EKTAGRAPHIC Visualmaker is meant for the person who needs a set of slides (or prints) that will explain a particular problem, reveal a specific idea, exhibit a pertinent set of data. He needs slides that are specially made for his purpose, slides that don't exist in an audiovisual library or a publisher's stockroom. Also, he needs them soon—in less than a week. And circumstances make it likely that he will have to produce the slides himself.

If you are such an individual, you can solve your problem effectively, quickly, economically with the Visualmaker, producing a group of slides that will be tailor-made for your requirements. No special skill is needed, no complicated equipment is involved. Even the time required between the exposure of the film and the return of the mounted slides has been minimized—by the provision of a special processing mailer—to no more than three days.

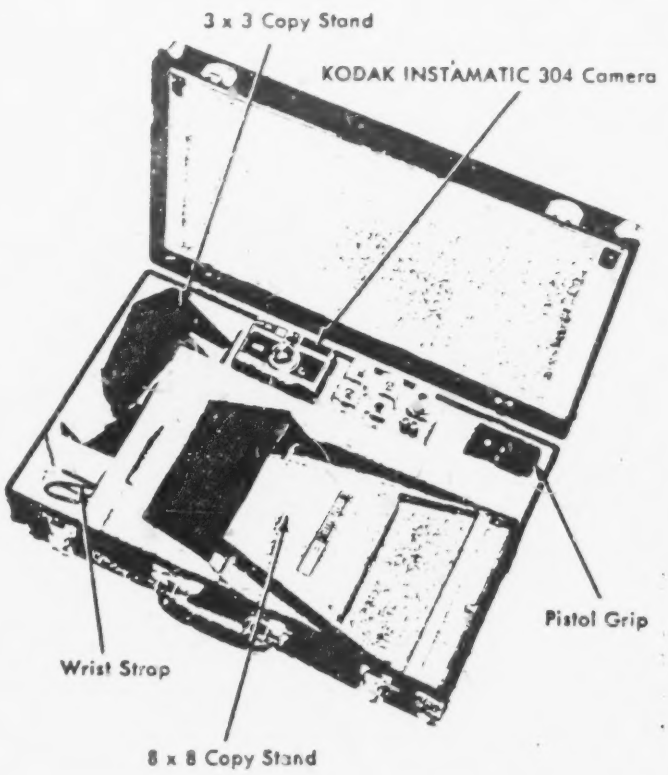
With the EKTAGRAPHIC Visualmaker a slide can easily be made of any piece of flat copy—printed, typed, drawn, painted—that is no larger than 8 by 8 inches. In addition, any 3-dimensional object that will fit in the same area and is of moderate thickness can be photographed with equal ease. The picture can, of course, be of a part or section of a large piece of copy or a large object.

Once you become familiar with the Visualmaker, you will find that its uses—and its value—are almost without limit. Especially in a teaching situation, the quick and simple slide-making capabilities of the kit will prove again and again to be most welcome.

COMPONENTS AND SUPPLIES

In the rugged carrying case of your Visualmaker you will find these components and supplies—

- a KODAK INSTAMATIC 304 Camera
- a wrist strap for the camera (to be attached when the camera is used without a copy stand)
- a 20-exposure cartridge of size 126 KODACHROME-X Film; 2 manganese alkaline AAA batteries; 5 flashcubes



- an EKTAGRAPHIC Visualmaker Copy Stand, 3 x 3-inch
- an EKTAGRAPHIC Visualmaker Copy Stand, 8 x 8-inch
- a pistol grip for use with the 8 x 8 stand when the camera-plus-stand assembly is to be hand-held

THE COPY STANDS DESCRIBED

Below are listed some of the specifications of the two copy stands as a preliminary to an understanding of how the camera functions in combination with the stands. Detailed information about the camera and its operation is presented in "About the Camera," page 6.

The 3 x 3 Copy Stand. When this stand is used, the *area that is photographed* is approximately 3 inches square. The area actually framed by the stand is, however, slightly larger than 3 by 3 inches, so allow a margin of about 1/8 inch between the sides of your subject and the bottom inside edges of the stand.

Acceptably sharp focus is obtained within a range extending from about 1/2 inch above the subject plane to approximately 3/8 inch below the subject plane. ("Subject plane" is the table top when you are using the copy stand on a work table.)

Given the field size and depth of field stated here, you can see that the 3 x 3 stand is ideal for photographing details of a painting, drawing, or map, or for making a picture of such small objects as coins, stamps, insignia, insects, botanical specimens, machine parts, and many other things. Another use of this stand is to make copies of the full image area of a 3 1/2 by 3 1/2-inch KODACOLOR Print (standard print size from several square negative formats).

The 8 x 8 Copy Stand. With this stand, the *area that is photographed* is approximately 8 by 8 inches. Here again, the square actually framed by the stand is slightly larger than 8 by 8 inches and the subject material for a picture should be kept somewhat in from the bottom inside edges of the stand. To make certain all parts of your material are included in the photograph, allow a 1/2 to 3/4-inch margin between each side of your subject and the corresponding edge of the stand.

Any object photographed with this frame will be in *acceptably sharp focus* if its thickness does not extend more than 2 inches above or about 1 1/2 inches below the subject plane.

The field size and depth of field with this stand make the frame well suited for the photographing of prints, drawings, reproductions of paintings, graphs, charts, diagrams, passages of printed text, titles, flowers, small animals, groups of small biological specimens, and similar subjects.

BASIC OPERATION

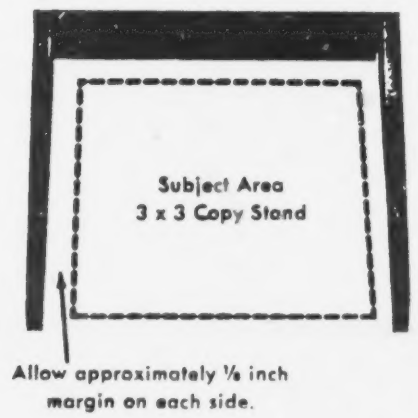
In the briefest terms, the steps for using the KODAK EKTAGRAPHIC Visualmaker (with the camera on either stand) are these:

1. Load the camera with film.
2. Install the camera on the copy stand.
3. Insert a flashcube in the flashcube socket.
4. Arrange your subject material in the field frame of the copy stand.
5. Press the shutter release.
6. Operate the film advance lever until it locks.

Now you are ready to take the next picture.

THE LIGHT AND THE SUBJECT

When the camera shutter release is pressed, the shutter opens for a fraction of a second the flashcube fires, and a portion of the light strikes the copy stand reflector and bounces at a low



angle across the subject area. This amount of light is always sufficient to illuminate the material that is being photographed.

You must remember, however, that the light comes from a single direction and because of this fact some shadows will be produced if there is a 3-dimensional object in the subject area. With a bit of experience in photographing such objects, you will learn to minimize the shadows or use them to best advantage.

Incidentally, whenever the KODAK INSTAMATIC 304 Camera is used on one of the copy stands, a flashcube must serve as the light source for your photographs, even *if you are taking pictures outdoors.*

Films for Use in the KODAK INSTAMATIC 304 Camera

Several Kodak films are available in the 126 cartridge, ready for instant loading in the KODAK INSTAMATIC 304 Camera. Your choice among these films will depend on the way you expect to use the pictures and the type of subject matter you will be photographing. The pictures can be in the form of color slides, color prints, or black-and-white prints.

FOR COLOR SLIDES

KODACHROME-X Film. Each cartridge produces 20 color slides in 2 by 2-inch cardboard mounts, suitable for projection in all standard 3mm slide projectors. A film noted for its subdued color rendition.

KODAK EKTACHROME-X Film. For 20 color slides in standard 2 by 2-inch mounts. A transparency film that produces bold, saturated colors.

FOR COLOR PRINTS

KODACOLOR-X Film. A color-negative film for all around use outdoors or, with blue flash, indoors. Provides 12 or 20 color prints in a standard 3½ by 3½-inch size. Enlargements can also be obtained.

FOR BLACK-AND-WHITE PRINTS

KODAK VERICHROME Pan Film. For 12 black-and-white prints. Through your photo dealer you can order standard 3½ by 3½-inch black-and-white prints or enlargements from your film negatives.

NOTE: The negatives obtained from KODACOLOR-X Film are primarily for color prints (3½ by 3½-inch or larger), but the same negatives can also be used to produce color slides. Conversely, both of the transparency films listed above are primarily intended for the production of ready-to-project color slides, but enlarged color prints can be made from the slides.

Duplicates of any KODACOLOR-X print can be obtained from the picture negative; duplicates of a color slide can be obtained from the original transparency.

PROCESSING SERVICES

Use a KODAK AVP-1 Prepaid Processing Mailer for expedited processing of either transparency film—KODACHROME-X or KODAK EKTACHROME-X. This mailer assures that your film will be returned to you, fully processed and mounted in cardboard mounts, in no more than three days. (Do not use the AVP-1 Mailer to order the processing of KODACOLOR-X Film.)

Consult your Kodak AV Dealer for all film processing or printing services. From your dealer you can:

- purchase the KODAK AVP-1 Prepaid Processing Mailer
- order processing and printing of KODACOLOR-X Film
- order duplicate slides or prints
- order prints made from slides or slides made from KODACOLOR-X negatives
- order enlarged prints (5 by 5, 8 by 8, or 11 by 11-inch) to be made from any color slide or negative

NOW THAT YOU HAVE COMPLETED READING THE INFORMATION SECTION OF THIS PACKAGE TURN TO OBJECTIVE 1 ON PAGE

EVALUATION OF SLIDE TAPE SERIES

Evaluate the end product by having two other individuals fill out the following form:

Place a check in the appropriate box - ✓

YES	NO	
☐	☐	1. Does the presentation satisfactorily cover your objectives in the correlating LAP?
☐	☐	2. Is there a smooth flow from one picture or idea to the next one?
☐	☐	3. Is the presentation too long, requiring deletions?
☐	☐	4. Have important points not apparent in the planning stages been left out?
☐	☐	5. Should some of the pictures be replaced or additional ones make?
☐	☐	6. Is the material technically good?

COMMENTS:

(Reproduce this form to accomplish desired number of evaluations suggested).

BIBLIOGRAPHY

Books:

Brown, Lewis, Harcleroad, Audio-Visual Instruction: Materials and Methods; McGraw Hill Book Co., N. Y., N. Y. 1959.

Kemp, Jerrold, Planning and Producing Audio Visual Materials; Chandler Publishing Co., San Francisco, California 1963.

Kinder, James S., Audio Visual Materials and Techniques; American Book Co., N. Y., N. Y. 1959.

Mager, Robert F., Preparing Objectives for Programmed Instruction; Fearon Publishers, San Francisco 1961.

Pamphlets:

Audiovisual Planning Equipment Kodak pamphlet No. S-11 Rochester, N. Y. 1966 (Free).

Basic Titling and Animation - Kodak Publication No. S-21 Rochester, N. Y., 1965 (Price $1.00).

Kodak Art Work Template - S-25 Rochester, N. Y. 1965 (Price $1.00).

Kodak Black and White Films in Rolls - Kodak Publications No. A F-13 Rochester N. Y. 1967 (Price $.95)

Kodak Color Films - Kodak Publication No. E-77 Rochester N. Y. 1961 (Price $1.00).

Planning and Producing Visual Aids - Kodak Pamphlet No. S-13, Rochester, N. Y. (Free).

Producing Slides and Filmstrips - Kodak Publication No. S-8, Rochester, N. Y. 1966 (Price $1.00).

- APPENDIX C -

ANALYSIS OF TEST #1 EDUCATIONAL OBJECTIVES

NUMBER OF PARTICIPANTS 33

PART I - Writing Objectives

All Correct	30
One Correct	2
Both Incorrect	1

PART II - Choosing Correctly Stated Objectives.

This is a list of the question and the number of incorrect responses.

Question	X	Question	X
1	1	11	1
2	24	12	1
3	6	13	19
4	9	14	3
5	15	15	7
6	0	16	1
7	1	17	4
8	7	18	0
9	0	19	6
10	2	20	2

Question #2 deals with the affective domain and is involved with a response to a questionnaire being a valid behavior. [Rated as a poor question.]

Question 5 is teacher centered and as implied needs no students involved in the process.

Question 13 deals in the affective domain which seems to be creating difficulty.

PART III - Instructional Objective Preference List

Scores ranged from 98 to 62 on possible 100 points.

Dr. James Popham is cooperating with the coordinator by evaluating our analysis.

- APPENDIX D -

OE 619 (REV. 6-67)

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

BUDGET BUREAU NO. 51-R0652
APPROVAL EXPIRES 12-31-69

REPORT OF EDUCATIONAL RESEARCH EXPENDITURES

Grants or Contracts With Bureau of Research

COMPLETE ORIGINAL AND FIVE (5) COPIES OF THIS REPORT AND RETURN TO:

RESEARCH ALLOCATION AND ANALYSIS STAFF
BUREAU OF RESEARCH
U.S. OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

DATE OF THIS REPORTING PERIOD
FROM: 1/15/68 TO: 1/14/69

TYPE OF REPORT (Check one)
[X] PROGRESS REPORT [ ] FINAL REPORT

NAME AND ADDRESS OF GRANTEE OR CONTRACTOR (Street, city, state)	PROJECT NO.	GRANT OR CONTRACT NO.
Dr. G. T. Alexander Room 404, 50 Seventh St., N. E. Atlanta, Georgia 30323	8-0165 PROJECT OFFICER G. T. Alexander	OEG-0-8-080165-2672 (085)

ROUND TO NEAREST DOLLAR

	ITEM	EXPENDITURES AS OF THIS REPORTING PERIOD	CUMULATIVE EXPENDITURES
	SUMMARY OF FEDERAL FUNDS (Totals as of the date above)		
A	FEDERAL FUNDS RECEIVED		$ 18,949.00
B	GRANT OR CONTRACT EXPENDITURES		17,594.25
C	BALANCE ON HAND (Line A − B = C) →		$ 1,354.75
2	EXPENDITURES FROM FEDERAL FUNDS		
A	DIRECT COSTS:	$	$ 11,789.27
1	SALARIES AND WAGES		736.85
2	EMPLOYEE BENEFITS		4,485.53
3	TRAVEL		482.60
4	SUPPLIES AND MATERIALS		100.00
5	COMMUNICATIONS		
6	SERVICES	$	$
A	DUPLICATION AND REPRODUCTION		
B	STATISTICAL		
C	TESTING		
D	OTHER		
7	FINAL REPORT PRODUCTION		
8	EQUIPMENT ALLOWANCE		
9	OTHER (As provided in grant or contract)		
10	TOTALS (Direct costs) →	$	$ 17,594.25
B	INDIRECT COST RATE ____ % of _____ _____	$	$
C	TOTALS (Sum of A + B) →		
D	COST SHARING ____ % LOCAL CONTRIBUTION	$	$

REPORT PREPARED BY (Name and title)

X Samuel D. Smith ESEA 70 Coordinator

NAME AND TITLE OF FISCAL OFFICER

William J. Minton

W. J. Minton 1-15-69

DATE

-6019 (REV. 6-67)

- APPENDIX E -

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

BUDGET BUREAU NO. 51-R0332
APPROVAL EXPIRES 12-31-69

REPORT OF EDUCATIONAL RESEARCH EXPENDITURES

Grants or Contracts With Bureau of Research

OMPLETE ORIGINAL AND FIVE (5) COPIES OF THIS REPORT AND RETURN TO:

RESEARCH ALLOCATION AND ANALYSIS STAFF
BUREAU OF RESEARCH
U.S. OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

DATE OF THIS REPORTING PERIOD
FROM: 1/15/69 TO: 6/30/71

TYPE OF REPORT *(Check one)*
☐ PROGRESS REPORT ☒ FINAL REPORT

'E AND ADDRESS OF GRANTEE OR CONTRACTOR *(t, city, state)*	PROJECT NO.	GRANT OR CONTRACT NO.
. R. T. Alexander om 404, 50 Seventh St. N.E. lanta, Georgia 30323	8-0165 PROJECT OFFICER R. T. Alexander	OEG-0-8-080165-2672 (085)

ITEM			ROUND TO NEAREST DOLLAR	
SUMMARY OF FEDERAL FUNDS *(Totals as of the date above)*			EXPENDITURES AS OF THIS REPORTING PERIOD	CUMULATIVE EXPENDITURES
A	FEDERAL FUNDS RECEIVED			$ 31,414.75
B	GRANT OR CONTRACT EXPENDITURES			31,766.98
C	BALANCE ON HAND *(Line A – B = C)* →			$ (352.23)
EXPENDITURES FROM FEDERAL FUNDS				
A	DIRECT COSTS:			
	1	SALARIES AND WAGES	$	$ 19,491.57
	2	EMPLOYEE BENEFITS		1,218.19
	3	TRAVEL		6,972.73
	4	SUPPLIES AND MATERIALS		2,882.76
	5	COMMUNICATIONS		824.05
	6	SERVICES		
		A DUPLICATION AND REPRODUCTION	$	$
		B STATISTICAL		
		C TESTING		
		D OTHER		
	7	FINAL REPORT PRODUCTION		
	8	EQUIPMENT ALLOWANCE		377.68
	9	OTHER *(As provided in grant or contract)*		
	10	TOTALS *(Direct costs)* ⇨	$	$ 31,766.98
B	INDIRECT COST RATE____% of _____ _____		$	$
C	TOTALS *(Sum of A + B)* ⇨			
D	COST SHARING____% LOCAL CONTRIBUTION		$	$

EPORT PREPARED BY *(Name and title)*

lbert R. Timm
iscal Supervisor, Federal Projects

AME AND TITLE OF FISCAL OFFICER

W. G. Winter per A. A. Heller Asst. Dir. Finance

DATE
10/7/71